

CLAIMS

DNA FRAGMENTS OF THE METHYLOTROPHIC *Pichia pastoris* YEAST *ICL* GENE.

1. Recombinants DNA fragments characterized because its contains the nucleotides sequences identified as Seq.1 and Seq .2, wherein said DNA fragments belong to the *ICL* gene isolated from *P. pastoris*, which are able to regulate the expression of an heterologous genes in yeasts, when these are operably linked to one of the said DNA fragment designated as Seq. 1 or Seq. 2 or with both.
2. A recombinant DNA fragment identified as Seq. 1 according to claim 1 wherein said DNA fragment has the nucleotide sequence described in the sequence list as Seq. 1, from about nucleotide 1 to 684, which compress the 5' regulatory region of the *ICL* gene isolated from *P. pastoris*.
3. A recombinant DNA fragment identified as Seq. 1 according to claims 1 and 2, characterized because is able to regulate the expression of an heterologous gene operably linked to the said DNA fragment, repressing the expression of the heterologous gene when glucose is present in concentrations of about 2%, or inducing the expression in absence of glucose or in presence of 3% of ethanol.
4. A recombinant DNA fragment identified as Seq. 2 according to claims 1, wherein said DNA fragment has the nucleotide sequence described in the sequence list as Seq. 2, from about nucleotide 1 to 360, which compress the 3' regulatory region of the *ICL* gene isolated from *P. pastoris*.
5. A recombinant DNA fragment obtained by recombinant or synthetic way and characterized by contains the nucleotide sequence of the fragments designated as Seq. 1 or Seq. 2, or part of these according to claims 1,2,3, and 4 and should include one or several regulatory elements necessary to the expression of an heterologous genes in an appropriate host cells.